

Old Croton Aqueduct,  
Saw Mill River Culvert  
Spanning Nepperhan Ave.  
Yonkers  
Westchester County  
New York

HAER NY-118

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PHOTOGRAPHS

Historic American Engineering Record  
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HISTORIC AMERICAN ENGINEERING RECORD

NY-118

OLD CROTON AQUEDUCT  
SAW MILL RIVER CULVERT

Date: 1838-39

Location: Spanning Nepperhan Ave., Yonkers, Westchester County, New York.

Engineer: John B. Jervis

Owner: Originally; New York City Water Board  
Presently; Tatic State Parkway Authority.

Significance: The Old Croton Aqueduct is an outstanding example of 19th century civil engineering and was New York City's first municipal water project. The culvert at Saw Mill River is notable because, instead of spanning the river with a single arch, Jervis used two smaller arches sharing a common center footing. The roadway arch was altered to over twice its size in the late 19th century.

Transmitted by: Daniel Clement, 1984. For further information regarding the Old Croton Aqueduct please refer to NY-107 through NY-117, NY-119 and NY-120 (HAER).

The Old Croton Aqueduct, New York City's first major water supply project, was constructed between 1838 and 1842, with John B. Jervis as chief engineer. Along most of its 40-mile length, the aqueduct is underground, with a foot path along the right-of-way. The aqueduct was a landmark of 19th century engineering, and it continued to supply water to New York City until 1955. Some other communities continued to draw water from the aqueduct until 1965, when the gates at the Croton Dam were closed and the aqueduct went out of use. The right-of-way is being developed for public recreation purposes as the Old Croton Trailway State Park by the Taconic State Park Commission.

"The major portion of the aqueduct is constructed of brick...the foundation of the tunnel is formed with concrete, the side walls of stone; the bottom and sides of the interior are faced with brick, and the top is covered with an arch of brick. Maximum interior dimensions measure 8-1/2' high by 7-1/2' wide" (National Register Nomination form). Where streams intersected the path of the aqueduct, culverts were built to allow the stream to flow under the aqueduct without damaging it. "Cut stone lines the bottom of the waterways; there are stone side walls surmounted by an arch of stone. Buttresses and wing walls are at each end of the culvert to guide the water to and from the channel-way, and parapet walls are located over the tops of the channel-ways at each end to maintain the embankment of earth over the culvert" (National Register Nomination form).

At the Saw Mill River Valley, the aqueduct is enclosed in an embankment crossing Saw Mill River on two stone arches and Nepperhan Avenue on one larger stone arch. The original Nepperhan Avenue Tunnel was 20 feet wide, allowing two lanes of traffic to pass. The tunnel was later widened to 50 feet. The foundation of the embankment structure is 50 feet below the top of the embankment, the sides of which are stabilized with dry, rubble-stone paving.

#### Sources of Information

For more information on the Old Croton Aqueduct, see the National Register Nomination form prepared by Lenore M. Rennenkampf, 1973. The bibliography from the nomination form may be found on page 3. For other Croton Aqueduct sites in the HAER collection, see:

HAER No. NY-116	OLD CROTON AQUEDUCT, MAINTENANCE BUILDING
HAER No. NY-115	OLD CROTON AQUEDUCT, OVERSEER'S HOUSE
HAER No. NY-117	OLD CROTON AQUEDUCT, QUARRY RAILROAD BRIDGE
HAER No. NY-114	OLD CROTON AQUEDUCT, JEWELS BROOK CULVERT
HAER No. NY-113	OLD CROTON AQUEDUCT, MILL RIVER WASTE WEIR
HAER No. NY-112	OLD CROTON AQUEDUCT, MILL RIVER CULVERT
HAER No. NY-111	OLD CROTON AQUEDUCT, SING SING KILL BRIDGE
HAER No. NY-110	OLD CROTON AQUEDUCT, VENTILATOR NUMBER 9
HAER No. NY-108	OLD CROTON AQUEDUCT, INDIAN CREEK CULVERT

HAER No. NY-120	OLD CROTON AQUEDUCT
HAER No. NY-109	OLD CROTON AQUEDUCT, NORTHERN WASTE WEIR
HAER No. NY-107	OLD CROTON AQUEDUCT, ENTRANCE ENTABLATURE

Major Bibliographical References

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New York and London: Wiley and Putnam, 1843.

Vollmer Associates. Master Plan Report for Recreational Development of the Old Croton Trailway.  
62 Fifth Avenue, New York City. July 15, 1970.

Vollmer Associates. Report on the Old Croton Aqueduct in Westchester County.  
62 Fifth Avenue, New York City, November 15, 1971.

Weidner, Charles H. Water For A City.  
New Brunswick, New Jersey: Rutgers University Press, 1974.

Project Information: The Nepperhan Avenue arch is being demolished as part of the Nepperhan Arterial project, which is being carried out by the New York State Department of Transportation with Federal Highway Administration funds. Mitigative documentation was prepared by Joann Ryan for the New York State Department of Transportation, March 1985

